



# HIENERGY SERIES ALL-IN-ONE RESS

Single-Phase Solution

2024 TOTAL REVENUE  
(USD)



56.82<sub>B</sub>

2024 NET PROFIT  
(USD)



5.34<sub>B</sub>

NUMBER OF EMPLOYEES



190<sub>K+</sub>

BY S&P/MOODY'S



A/A2/A

FORTUNE GLOBAL 500  
2024



# 277

FORBES GLOBAL 2000  
2024



# 205

BRAND FINANCE 2024 TOP  
500 MOST VALUABLE  
BRANDS



# 236

BRAND FINANCE 2024 TOP  
100 MOST TECH  
BRANDS



# 40

# ENERGY LINKS ALL

## ODM VALUE CHAIN

A REPEATABLE PATH FOR EXCELLENCE IN QUALITY DELIVERY

### GLOBAL R&D STRATEGY

4

Central Academy  
Industrial Technology Research Institute  
Industrial Technology Research Institute  
AI Research Institute

Research Institutes

33

R&D Centers

25%

Masters & PhDs

50+

Core Laboratory

Aesthetics & Design Center

### BILLION LEVEL SUPPLY CHAIN

27.6 B

Procurement Volume

100K+

Supplier System

100%

Quality Sampling

Top 5

Supplier Resources

### INTELLIGENT MANUFACTURING

50+

Years Manufacturing Experience

40

Global Manufacture  
Centers

Inhouse

Production Lines

Beijing & Anqing Manufacturing Center

100K

GMP Cleanroom

Lighthouse /

Digital Factory

### QUALITY CONTROL

130 M

Dollars Investment

1<sup>st</sup>

in Industry to Conduct:

Mechanical back-to-back test  
Simulation test  
Motor Load Test

CSA

Cooperative  
Sightings Lab

UL/CE

Certificates

# HIENERGY SERIES SINGLE-PHASE ALL-IN-ONE RESS

5/6kW | 5/10/15/20/30kWh



## SYSTEM CONFIGURATION / MULTIPLE SYSTEM SIZING

5, 6kW/5kWh



Hybrid inverter × 1  
BMS Control box × 1  
Battery pack × 1  
Base × 1

5, 6kW/10kWh



Hybrid inverter × 1  
BMS Control box × 1  
Battery pack × 2  
Base × 1

5, 6kW/15kWh



Hybrid inverter × 1  
BMS Control box × 1  
Battery pack × 3  
Base × 1

5, 6kW/20kWh



Hybrid inverter × 1  
BMS Control box × 2  
Battery pack × 4  
Base × 2  
2m parallel cable × 1

5, 6kW/30kWh



Hybrid inverter × 1  
BMS Control box × 2  
Battery pack × 6  
Base × 2  
2m parallel cable × 1

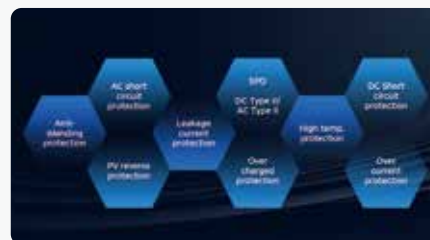
## ULTIMATE SAFETY



5 Level cell Protection



Advanced Thermal Management



System Protection

## EASY INSTALLATION



Stackable Modular Design



Quick Plug, No Extra Wiring



Quick Installation and Commissioning

## RESIDENTIAL INTEGRATION



Durable Design for Extreme Conditions



Aesthetic & Harmonious Design



Quiet Operation

## SMART CONTROL



3rd Party EMS Compatibility



TOU



Seamless On/Off Grid Transition

### ON-GRID AND OFF-GRID SUPPORTED

Compatible with both grid-connected and standalone systems  
Ideal for homes with backup power needs or remote locations

### VPP CAPABILITY

Can be coordinated via Virtual Power Plant (VPP) networks  
Enables participation in energy trading and grid services

### ※CEC Approved Product

Listed by the Clean Energy Council (CEC), Australia — compliant with local standards and eligible for government rebates.

## I AFTER SALES

10

Years Warranty

Hybrid Inverter &  
Battery Packs

3

Levels support

Online support + local support  
+ experts onsite

24

Hours response

Response in time  
Parts stock in Australia



### Intelligent Warehousing

Building up logistics system, one-stop supply of equipment and accessories to shorten delivery time.



### Remote Support

Online remote support, discover field problems via data logger. Based on demand of customers and partners, provide support within 24 hours.



### Local After-sales Team

Local after-sales team from Hiconics will be able to provide onsite technical support and offer training regarding the product installation and after-sales issues.

Fast, flexible and accurate response to maximize customer personalized needs.

## PRODUCT PARAMETER

|                                                           | HEC2-S5.0Hr2                                       |                                                 | HEC2-S6.0Hr2 |           |
|-----------------------------------------------------------|----------------------------------------------------|-------------------------------------------------|--------------|-----------|
| PV Input                                                  | Max.PV array power[W]                              | 3750/3750                                       |              |           |
|                                                           | Max.DC voltage[V]                                  | 600                                             |              |           |
|                                                           | Nominal DC operating voltage[V]                    | 360                                             |              |           |
|                                                           | MPPT voltage range[V]                              | 100-540                                         |              |           |
|                                                           | MPP voltage range for nominal power[V]             | 185-480                                         |              | 225-480   |
|                                                           | Start up voltage[V]                                | 120                                             |              |           |
|                                                           | Max.input current(A/B)[A]                          | 15/15                                           |              |           |
|                                                           | Max.short circuit current(A/B)[A]                  | 18/18                                           |              |           |
|                                                           | No.of MPP tracks/String per MPP tracker            | 2/1                                             |              |           |
| BAT Side                                                  | Battery voltage range[V]                           | 85-400                                          |              |           |
|                                                           | Battery voltage range for nominal power[V]         | 225-400                                         |              | 250-400   |
|                                                           | Recommended battery voltage[V]                     | 300                                             |              |           |
|                                                           | Max.charge/discharge current[A]                    | 25/25                                           |              |           |
|                                                           | Communication interfaces                           | RS485/CAN                                       |              |           |
|                                                           | Reverse connect protection                         | Yes                                             |              |           |
| AC Grid Side (On-grid)                                    | Nominal AC output power[W]                         | 5000                                            |              | 6000      |
|                                                           | Max.Output Power(W)                                | 5000                                            |              | 6000      |
|                                                           | Nominal Apparent Power Output to Utility Grid (VA) | 5000                                            |              | 6000      |
|                                                           | Max. Apparent Power Output to Utility Grid (VA)    | 5000                                            |              | 6000      |
|                                                           | Nominal Apparent Power from Utility Grid (VA)      | 5000                                            |              | 6000      |
|                                                           | Max. Apparent Power from Utility Grid (VA)         | 6000                                            |              | 6000      |
|                                                           | Nominal grid voltage[V]                            | L/N/PE 230Va.c                                  |              |           |
|                                                           | Grid Voltage Range[V]                              | 180-280                                         |              |           |
|                                                           | Nominal grid frequency[Hz]                         | 50                                              |              |           |
|                                                           | AC Grid Frequency Range (Hz)                       | 50±5                                            |              |           |
|                                                           | Max. output AC current to Utility Grid[A]          | 21.7A a.c                                       |              | 26.1A a.c |
|                                                           | Rate output AC current to Utility Grid[A]          | 21.7A a.c                                       |              | 26.1A a.c |
|                                                           | Rated AC Current From Utility Grid (A)             | 21.7A a.c                                       |              | 26.1A a.c |
|                                                           | Max. AC Current From Utility Grid (A)              | 26.1A a.c                                       |              | 26.1A a.c |
|                                                           | Power factor                                       | ~1 (Adjustable from 0.8 leading to 0.8 lagging) |              |           |
|                                                           | I.THD[%]                                           | <5@Rated power                                  |              |           |
|                                                           | EPS Side                                           | Back-up Nominal Apparent Power(VA)              | 5000         |           |
| Nominal power[W]                                          |                                                    | 5000                                            |              | 6000      |
| Max. Output Apparent Power without Grid (VA)              |                                                    | 7500@10sec                                      |              |           |
| Max. Output Apparent Power with Grid (VA)                 |                                                    | 7500@10sec                                      |              |           |
| Nominal output voltage[V]                                 |                                                    | L/N/PE 230Va.c                                  |              |           |
| Nominal output frequency[Hz]                              |                                                    | 50                                              |              |           |
| Nominal Output Current (A)                                |                                                    | 21.7                                            |              | 26.1      |
| Max.output current[A]                                     |                                                    | 21.7                                            |              | 26.1      |
| Max.output overcurrent protection[A]                      |                                                    | 32.6@10sec                                      |              |           |
| Switching from Grid Connected Mode to Standalone Mode[ms] |                                                    | <20                                             |              |           |
| Output THD[%]                                             |                                                    | <5@Linear Load                                  |              |           |

## Efficiency

|                                        |                               |                               |
|----------------------------------------|-------------------------------|-------------------------------|
| MPPT efficiency[%]                     | 99.9                          |                               |
| Euro efficiency[%]                     | 95.2                          | 95.2                          |
| Max.efficiency[%]                      | 96.7                          | 96.8                          |
| Battery charge/discharge efficiency[%] | 97.6(PV-BAT),<br>96.0(BAT-AC) | 97.6(PV-BAT),<br>96.0(BAT-AC) |

## Environment Limit

|                                 |                           |
|---------------------------------|---------------------------|
| Ingress protection              | IP65                      |
| Protection class                | Class I                   |
| Pollution degree                | PD3                       |
| Over voltage category           | Ⅲ(MAINS),Ⅱ(DC)            |
| Operating temperature range[°C] | -20~+60 (derating at +45) |
| Max.operation altitude[m]       | <2000                     |
| Humidity                        | 0-100%                    |
| Cooling Method                  | Natural Convection        |
| User Interface                  | LED,APP                   |
| Communication with BMS          | CAN/RS485                 |
| Communication with Meter        | RS485                     |
| Communication with Portal       | WIFI                      |
| Typical noise emission[dB]      | <40                       |
| Dimension (W*H*D) [mm]          | 800*450*160               |
| Weight[KG]                      | 34                        |
| Topology                        | Non-isolated              |
| Self-consumption at Night (W)   | <25                       |
| DC Connector                    | MC4 (4~6mm <sup>2</sup> ) |
| AC Connector                    | Quick Plug                |
| Standard warranty[years]        | 10                        |

## Standard

|               |                                                                |
|---------------|----------------------------------------------------------------|
| Safety        | IEC/EN 62109-1&2, IEC62477                                     |
| EMC           | IEC61000-6-1, IEC61000-6-3, AS/NZS 61000.6.3, AS/NZS 61000.6.1 |
| Environment   | IEC60529, IEC60068                                             |
| Efficiency    | IEC61683                                                       |
| Certification | CEI0-21, VDE-AR-N 4105, NRS 097-2-1                            |

## | HEC2-BHPxxr2 Series

|                                     | HEC2-BHP50r2                                                                | HEC2-BHP100r2     | HEC2-BHP150r2     |
|-------------------------------------|-----------------------------------------------------------------------------|-------------------|-------------------|
| Component                           | Base+BMS+1*Module                                                           | Base+BMS+2*Module | Base+BMS+3*Module |
| Battery Capacity                    | 5kWh                                                                        | 10kWh             | 15kWh             |
| Battery Qty                         | 1                                                                           | 2                 | 3                 |
| Nominal Voltage[V]                  | 102.4                                                                       | 204.8             | 307.2             |
| Maximum protection voltage[V]       | 116.8                                                                       | 233.6             | 350.4             |
| Minimum protection voltage[V]       | 89.6                                                                        | 179.2             | 268.8             |
| Nominal capacity[Ah]                | 50                                                                          | 50                | 50                |
| Total energy[kWh]                   | 5.1                                                                         | 10.2              | 15.3              |
| Nominal power [kW]                  | 2.56                                                                        | 5.12              | 7.68              |
| Nominal charge/discharge current[A] | 25                                                                          |                   |                   |
| Max. charge/discharge current[A]    | 25                                                                          |                   |                   |
| Cycle life                          | 6000 Cycles (@0.5C,90%DOD,25°C,70%SOH)                                      |                   |                   |
| Expected life time                  | 10 Years (70%SOH)                                                           |                   |                   |
| Operating Temperature (°C)          | -20 to 55 (derating above 45°C)                                             |                   |                   |
| Storage temperature[°C]             | -20°C to 55°C (1 months) ; -20°C to 45°C (3 months) ; -20°C to 35°C(1 year) |                   |                   |
| Altitude[m]                         | Below 2000m                                                                 |                   |                   |

|                                 |                                                    |                                |                                 |
|---------------------------------|----------------------------------------------------|--------------------------------|---------------------------------|
| Protection                      | IP65                                               |                                |                                 |
| System to Inverter              | RS485/CAN2.0                                       |                                |                                 |
| Battery to battery / BMS        | Daisy chain                                        |                                |                                 |
| Display Interface               | LED                                                |                                |                                 |
| Switch on/off                   | Button*1+Breaker*1                                 |                                |                                 |
| Certification                   | CE, IEC62619, IEC62040, IEC60529, IEC61000, UN38.3 |                                |                                 |
| Weight[kg]                      | 69±4                                               | 124±6                          | 179±8                           |
| External dimensions(W*H*D) (mm) | (800±20)*(530±30)<br>*(160±20)                     | (800±20)*(840±30)<br>*(160±20) | (800±20)*(1150±30)<br>*(160±20) |
| Remark                          | 1 Series                                           |                                |                                 |

| HEC2-BHPxxr2 Series                 | HEC2-BHP200r2-A                                                             | HEC2-BHP300r2                    |
|-------------------------------------|-----------------------------------------------------------------------------|----------------------------------|
| Component                           | 2*(Base+BMS+2*Module)                                                       | 2*(Base+BMS+3*Module)            |
| Battery Capacity                    | 20kWh                                                                       | 30kWh                            |
| Battery Qty                         | 4                                                                           | 6                                |
| Nominal Voltage[V]                  | 204.8                                                                       | 307.2                            |
| Maximum protection voltage[V]       | 233.6                                                                       | 350.4                            |
| Minimum protection voltage[V]       | 179.2                                                                       | 268.8                            |
| Nominal capacity[Ah]                | 100                                                                         | 100                              |
| Total energy[kWh]                   | 20.4                                                                        | 30.6                             |
| Nominal power [kW]                  | 10.24                                                                       | 15.36                            |
| Nominal charge/discharge current[A] | 50                                                                          |                                  |
| Max. charge/discharge current[A]    | 50                                                                          |                                  |
| Cycle life                          | 6000 Cycles (@0.5C,90%DOD,25°C,70%SOH)                                      |                                  |
| Expected life time                  | 10 Years (70%SOH)                                                           |                                  |
| Operating Temperature (°C)          | -20 to 55 (derating above 45°C)                                             |                                  |
| Storage temperature[°C]             | -20°C to 55°C (1 months) ; -20°C to 45°C (3 months) ; -20°C to 35°C(1 year) |                                  |
| Altitude[m]                         | Below 2000m                                                                 |                                  |
| Protection                          | IP65                                                                        |                                  |
| System to Inverter                  | RS485/CAN2.0                                                                |                                  |
| Battery to battery / BMS            | Daisy chain                                                                 |                                  |
| Display Interface                   | LED                                                                         |                                  |
| Switch on/off                       | 2*(Button*1+Breaker*1)                                                      |                                  |
| Certification                       | CE, IEC62619, IEC62040, IEC60529, IEC61000, UN38.3                          |                                  |
| Weight[kg]                          | 248±12                                                                      | 358±16                           |
| External dimensions(W*H*D) (mm)     | (1600±20)*(840±30)<br>*(160±20)                                             | (1600±20)*(1150±30)<br>*(160±20) |
| Remark                              | 2 Series Parallel                                                           |                                  |

